[0020]

Firstly, VRRP status of VoIP router is checked (step B1). Next, when VRRP status is master status or initialize status, network monitor status noticed from network monitor is checked (step B2). It is checked whether network monitor status is normal or abnormal (step B3). When network monitor status is normal, the value registered in UI processor 101 is set to the priority of VRRP packet, and VRRP status is set to master status (step B4). Further, VRRP packet is transmitted by multicast address (step B7).

[0021]

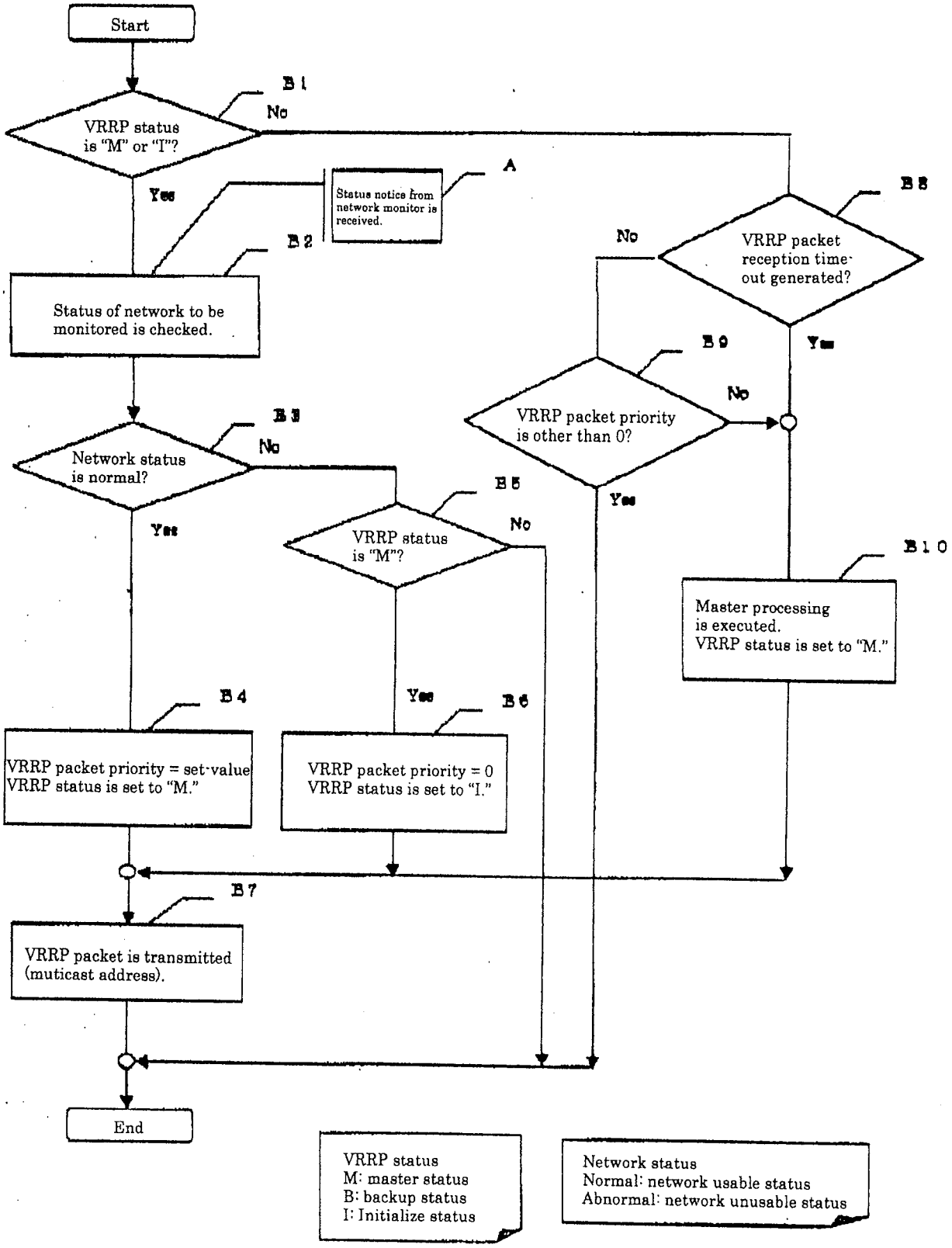
When network monitor status is abnormal, it is checked whether the present VRRP status is master status (step B5). When it is master status, "0" (master comes out from VRRP group) is set to the priority of VRRP packet, and VRRP status is set to initialize status (step B6). Further, VRRP packet is transmitted by multicast address (step B7).

[0022]

Also, VRRP status is checked, and when it is backup status, VRRP packet reception is monitored according to master down monitor timer to check for generation of reception time-out (step B8). In VRRP packet reception, it is checked whether priority in VRRP packet is 0 (step B9). When the priority of VRRP packet received is other than 0, it is the end of processing, and when the priority is "0," and VRRP packet reception time-out is generated, then master processing is executed, and VRRP status

is set to master status (step B10). Further, VRRP packet is transmitted by multicast address (step B7).

[Fig. 5]


Start
B1
VRRP status is "M" or "I"?
No
Yes
A
Status notice from network monitor is received.
B2
Status of network to be monitored is checked.
B3
Network status is normal?
No
Yes
B5
VRRP status is "M"?
No
Yes
B4
VRRP packet priority = set-value
VRRP status is set to "M."
B6
VRRP packet priority = 0
VRRP status is set to "I."
B7
VRRP packet is transmitted (muticast address).
End
B8
VRRP packet reception time-out generated?
No
Yes
B9
VRRP packet priority is other than 0?
No
Yes
B10
Master processing is executed.
VRRP status is set to "M."
VRRP status
M: master status
B: backup status
I: Initialize status
Network status
Normal: network usable status
Abnormal: network unusable status